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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,007	07/13/2005	Patric Schlecht	(WW) 28216 P US	7672
7590 M Robert Kestenbaum 11011 Bermuda Dunes NE Albuquerque, NM 87111			EXAMINER BOLES, DEREK	
			ART UNIT 3749	PAPER NUMBER
			MAIL DATE 06/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/519,007

Applicant(s)

SCHLECHT ET AL.

Examiner

Derek S. Boles

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/20/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-4 and 6-10 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/20/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 2, the phrase "with this" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "with this"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim 10 recites the limitation "according to one of the foregoing claims" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim. The claim would be more definite if the recitation were, according to any one of the foregoing claims, or a specific range of claims as in previous claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim(s) 1, 3, 4, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterly (4,192,457) in view of Mariani (4,971,025). Easterly discloses all of the limitations of the claim(s) except for heat transfer ribs. Mariani discloses the presence of heat transfer ribs. See 12. Hence, one skilled in the art would find it obvious to modify the system of Easterly to

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include the heat transfer ribs of Mariani for the purpose of energy efficiency. See Easterly's fig. 2, **58** for the burner, **30** for the heat exchange means, **34** for first heat exchange region, **32** for second heat exchange region, **36** for exhaust gas conducting space, **52** for the flow duct means. Regarding claim 4, each segment of duct **102** constitutes a different region.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easterly in view of Mariani. It is well-known in the art of HVAC to design a heat exchanger having multiple runs. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the features of a heat exchanger having multiple runs into the system of Easterly in view of Mariani for the purpose of increased heat transfer.

***Allowable Subject Matter***

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The provided references are representative of the state of the art that is applicable to the applicant's invention. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derek S. Boles at (571) 272-4872 or supervisory patent examiner Kenneth Rinehart at (571) 272-4881.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D.S.B.

  
**DEREK S. BOLES**  
**PRIMARY EXAMINER**  
**GROUP 3700**

6/11/07